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United States Patent [19]**Banker et al.**[11] **Patent Number:** **5,580,974**[45] **Date of Patent:** **Dec. 3, 1996**[54] **MICROFIBRILLATED OXYCELLULOSE
DISPERSIONS**[75] Inventors: **Gilbert S. Banker**, Iowa City; **Vijay
Kumar**, Coralville, both of Iowa[73] Assignee: **Biocontrol Incorporated**, Iowa City,
Iowa[21] Appl. No.: **420,089**[22] Filed: **Apr. 11, 1995****Related U.S. Application Data**[62] Division of Ser. No. 100,979, Aug. 3, 1993, Pat. No.
5,405,953.[51] **Int. Cl.⁶** **C08B 11/00**; C07H 15/04;
A61K 6/00[52] **U.S. Cl.** **536/56**; 536/84; 536/120;
536/124; 400/401[58] **Field of Search** 536/56, 84, 120,
536/124; 400/401[56] **References Cited****U.S. PATENT DOCUMENTS**

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Primary Examiner—Nathan M. Nutter
Attorney, Agent, or Firm—Robert D. Katz[57] **ABSTRACT**

Microfibrillated oxycellulose suitable for use as a carrier in agricultural, cosmetic, and topical and transdermal drug products, and as a binder and disintegrant in the making of tablets, is prepared by the oxidation of cellulosic materials with persulfate salts in water, with or without the presence of an aqueous inorganic acid, or in glacial or aqueous acetic acid.

17 Claims, 3 Drawing Sheets